

**CLAIMS**

What is claimed is:

- 1    1.    A reusable device for protecting an electronic component from electrostatic  
2        discharge (ESD), comprising:  
3        a substrate having a coupling region being adapted for detachable coupling to at  
4                least one of a cable and another device;  
5        at least one diode coupled to the substrate; and  
6        contact leads coupled to the coupling region of the substrate, the contact leads  
7                being in electrical communication with the at least one diode.
- 1    2.    A device as recited in claim 1, wherein the substrate is flexible.
- 1    3.    A device as recited in claim 1, wherein the substrate is substantially resilient.
- 1    4.    A device as recited in claim 1, wherein the at least one diode includes crossed  
2        diodes.
- 1    5.    A device as recited in claim 4, wherein the crossed diodes include multiple diodes  
2        aligned in series in each direction.

- 1 6. A device as recited in claim 5, wherein a number of diodes in one bias direction is  
2 different than a number of diodes in another bias direction.
- 1 7. A device as recited in claim 1, wherein the at least one diode has a response time  
2 of less than about 20 nanoseconds.
- 1 8. A device as recited in claim 1, wherein the at least one diode is contained in a  
2 chip, wherein the chip is coupled to the substrate.
- 1 9. A device as recited in claim 1, wherein a compression fitting is used to couple the  
2 coupling region of the substrate to the cable or the other device.
- 1 10. A device as recited in claim 1, wherein the device is used during testing of tape  
2 heads.
- 1 11. A device as recited in claim 1, wherein the device is used during testing of disk  
2 heads.
- 1 12. A device for protecting an electronic component from electrostatic discharge  
2 (ESD), comprising:  
3 a substrate having at least one coupling region being adapted for coupling to at  
4 least one of a cable and another device;  
5 at least one pair of crossed diodes coupled to the substrate; and

6 contact leads coupled to the coupling region of the substrate, the contact leads  
7 being in electrical communication with the at least one diode.

1 13. A device as recited in claim 12, wherein the substrate is flexible.

1 14. A device as recited in claim 12, wherein the substrate is substantially resilient.

1 15. A device as recited in claim 12, wherein each pair of crossed diodes include  
2 multiple diodes aligned in series in each direction.

1 16. A device as recited in claim 15, wherein a number of diodes in one bias direction  
2 is different than a number of diodes in another bias direction.

1 17. A device as recited in claim 12, wherein the diodes have a response time of less  
2 than about 20 nanoseconds.

1 18. A device as recited in claim 12, wherein the diodes are contained in a chip,  
2 wherein the chip is coupled to the substrate.

1 19. A device as recited in claim 12, wherein a compression fitting is used to couple  
2 the coupling region of the substrate to the cable or the other device.

1    20.    A device as recited in claim 12, wherein the device is used during testing of tape  
2           heads.

1    21.    A device as recited in claim 12, wherein the device is used during testing of disk  
2           heads.

1    22.    A reusable device for protecting a magnetic head from electrostatic discharge  
2           (ESD) during testing of the magnetic head, comprising:  
3           a substrate having first and second coupling regions, the first coupling region  
4                  being adapted for coupling to a cable, the second coupling region being  
5                  adapted for detachable coupling to at least one of a second cable and  
6                  another device;  
7           crossed diodes coupled to the substrate, a pair of the crossed diodes being present  
8                  for each element of the magnetic head being tested, each pair of crossed  
9                  diodes including multiple diodes aligned in series in each direction,  
10                 wherein the diodes have a response time of less than about 20  
11                 nanoseconds; and  
12           contact leads coupled to the coupling region of the substrate, the contact leads  
13                 being in electrical communication with the crossed diodes.